SUMMER ASSIGNMENT (2026-2027)

SUB: MATHEMATICS

CLASS: IX

1. Define rational, irrational and real numbers with some examples.
2. Write 5 rational and 5 irrational numbers between $\sqrt{2}$ and $\sqrt{5}$.
3. Write 5 rational and 5 irrational numbers between $\frac{2}{3}$ and $\frac{3}{5}$.
4. Convert the following in p/q form.
   (i) $0.4\overline{7}$ (ii) $2.\overline{34}$ (iii) $14.7\overline{03}$ (iv) 1.0054
5. Express the following rational numbers as decimals:
   (i) $\frac{327}{500}$ (ii) $\frac{27}{13}$ (iii) - $\frac{32}{45}$
6. Represent$\sqrt{8}$, $\sqrt{13}$ on the number line.
7. Express $0.6 + 0.\overline{7} + 0.4\overline{7}$ in the form of $\frac{p}{q}$, where p, q are co-prime integers and $q \neq 0$.
8. Prove that $\sqrt{5}$ is irrational.
9. Prove that $3 - 2\sqrt{5}$ is an irrational number, if it is given that $\sqrt{5}$ is an irrational.

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TERM- I

MATHS PRACTICAL ACTIVITIES

Write these activities in your Maths Lab copy.

1. To divide a line segment of length 14 cm in 9 equal parts using parallel line board.
2. To represent square root spiral upto $\sqrt{\mathbf{8}}$.
3. To verify that opposite sides of a parallelogram are equal by cutting and pasting.
4. To verify that diagonals of a parallelogram bisect each other by paper cutting and pasting.
5. To obtain mirror image of a plane figure in the x-axis and y-axis using graph paper.
6. To verify by demonstration that $(a + b)^3 = a^3 + b^3 + 3ab(a + b)$.
7. To show factorization by geometrical representation of the following:
   (i) $x^2 + 5x + 6$ (ii) $x^2 - 5x + 6$.

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MULTIPLE ASSESSMENT

Represent Irrational number up to $\sqrt{15}$ on Number line and shade it with your own creativity as per given example figures.

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